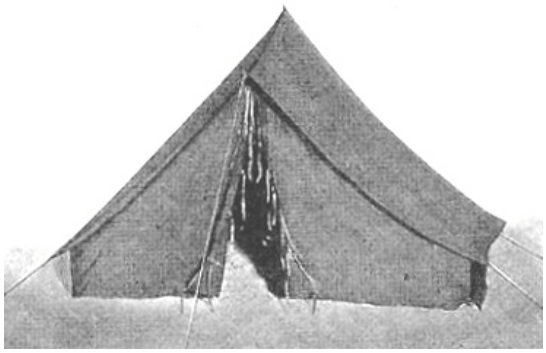
TENTS



Clive Elliott peers out from the canvas to review examples of British tents.

There is a growing tendency for show organisers to encourage vehicles to be part of a living history display or at very least, if camping with the vehicle, that the tentage should be of military origin. I find it fascinating to see the range of tentage that turns up at shows whether it is as a marquee for important things like drinking cider or merely the accommodation of an exhibitor. It is amusing to stroll towards a vehicle with a camera to see the owner's face when you just take a picture his tent!

Last time I looked at a range of British tentage for use with various vehicles, now I want to review some of the different types of tentage made for various climates. I will have to disappoint avid tent spotters, the limitation of space means only a few examples of various types can be described to illustrate design features. I have tried to embellish some entries with snippets of trivia that I have stumbled across whilst trawling through official books. These books, which are listed at the end, span over a hundred years and can give a fascinating insight into the military attitudes of a colonial power. I have omitted references to the use of horses and camels etc but many of the principles of camping remain the same today. Where I have quoted the stores catalogue number (e.g. JA 5704), it is prior to 1956. Where a NATO number (e.g. 8340-99-120-8579) is quoted it is from 1956 onwards. With the larger types of tentage, the length of service life can be considerable. Note that many tents of a stated weight actually have a total weight that is greater. This is due to the shipping weight of the complete assembly with tent pegs and the carrying bags, which particularly with wartime equipment may have included mallets.

The established space for a man to be accommodated in barracks was reckoned to be 60 square feet in a volume of 600 cubic feet. Under tentage it was permitted to fall to 12 square feet in a volume of 32 cubic feet. The main concern was not so much the comfort of the men, but the increased risk of the spread of disease, particularly in the tropics. In the South African War 1899-1902 the number of men admitted to hospital with disease was seventeen times greater than those admitted with wounds. Although there have been great advances in medicine, cramped accommodation is still an important consideration. The space is quoted for a 'man', officers require more space and this increases with ascending rank. So much so that in the Crimea War a Field Officer was entitled to have two tents.

Warm Climate Tentage – keeping out the heat

One of many problems with a warm climate is the heat that becomes entrapped within tentage. One of the easiest ways to try to insulate the occupants of the tent from being baked is to provide an additional canvas roof or flysheet. This design is well illustrated on now obsolete 'Indian Pattern' range of tents.

Tent, Indian Pattern, 40-lb (JA 4683)

The smallest of the Indian Pattern range this tent provided good protection from the effects of the sun but no protection from flying insects often prevalent in such climates. The tent, which was really a glorified shelter, consisted of an inner and outer roof supported by a single horizontal pole and an upright pole at each end. This accommodated either a Warrant Officer or a NCO.

Floor space:	7 ft x 6 ft
Pitching space:	15 ft x 15 ft
Height of walls:	1 ft 9 in
Height to ridge:	7 ft
Pitching party:	4 men
Total weight:	66 lb

Tent, Indian Pattern, 180-lb (JA 6930)

This tent provided more comprehensive protection and included an awning to exclude the sun. As the sun tracked round during the course of the day, the awning could be fitted at the opposite end of the tent.

Floor space: 14 ft x 14 ft
Pitching space: 30 ft x 24 ft
Height of walls: 2 ft
Height to ridge: 7 ft 8 in
Pitching party: 4 men
Total weight: 209 lb

Tent, Indian Pattern, Privates, Mk 2 (JA 4757)

This heavy tent was to house 16 British privates. It required good alignment of the 16 tension ropes that took the strain through the upper flysheet. The ropes to the inner roof and walls merely kept the canvas wrinkle-free and prevented the tent being blow down in the wind.

Floor space: 18 ft x 18 ft
Pitching space: 47 ft x 47 ft
Height of walls: 5 ft 6 in
Height to ridge: 12 ft 8 in
Pitching party: 1 N.C.O. & 8 men
Total weight: 623 lb

Most of these 'Indian Pattern' tents were designed to accommodate either British or Indian troops, but not together. More Indian troops were allocated per tent than for the British troops. e.g.

Tent, GS, 160-lb accommodated 16 British or 20 Indian soldiers
Tent, GS, 80-lb accommodated 8 British or 10 Indian soldiers

The space allocated for Indian troops to camp was less than for the British. Not only were the camping areas segregated but also the facilities for eating, washing, field hospitals and latrines. These latrines were marked with a yellow flag with a black circular disc in the middle and those for the British by a yellow flag with a red circular disc. This was not just racial segregation as there were cultural reasons why the construction of the latrines had to be quite different. Within Indian society there are differences of custom, caste and religion. Regiments and battalions were structured from the main ethnic groups, then sub-divided further according to 'classes'. British latrines and urinals were also segregated but according to rank. There was separate provision for Officers, Warrant Officers & NCOs and men. At any one time all these facilities were to accommodate 5% of a strength of 500 men. All latrines were to be positioned at least 100 yards from any kitchen or water supply.

Tent, 80-lb (JA 1535)

It was not just the Indian Pattern tents that utilised flysheets to help keep the heat off; particularly versatile was the Tent, 80-lb. This tent with doorways at each end, became the replacement for:

Tent, Shelter, R.A. JA 5704
Tent, Shelter, R.E. JA 5706
Tent, Telegraph JA 5708
Tent, Wireless Station JA 5709

Floor space: 14 ft x 8 ft
Pitching space: 24 ft x 18 ft
Height of walls: 2 ft 6 in
Height to ridge: 7 ft
Pitching party: 4 men
Total weight: 135 lb

This tent has been very successful having seen more than 60 years service.

It is still in use today but known as, **Tent, 80-lb (36.3kg) 8340-99-942-4583.**

Tent, Telegraph (JA 5708)
Although the Tent, Telegraph was taller than its replacement, it had markedly less floor space.

Floor space: 10 ft x 7 ft 6 in
Pitching space: 32 ft x 23 ft
Height of walls: 3 ft 6 in
Height to ridge: 8 ft 4½ in
Pitching party: 4 men
Total weight: 147 lb

Tent, 160-lb (JA 1549)
This large tent with doorways at each end was used in conjunction with the groundsheet Mk VIII. It was a widely used tent and replaced the following specialist tents:

Tent, C.S., Mk 5	**JA 5685**
Tent, R.D., Large	**JA 5774**
Tent, R.D., Small	**JA 1839**

Floor space: 14 ft x 14 ft
Pitching space: 24 ft x 24 ft
Height of walls: 2 ft 6 in
Height to ridge: 7 ft
Pitching party: 1 N.C.O. & 4 men
Total weight: 165 lb

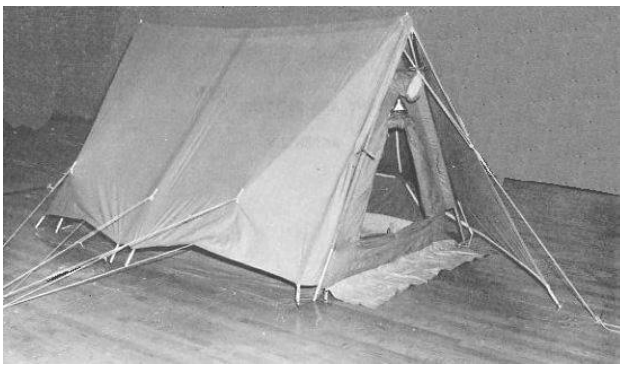
Tent, R.D., Small (JA 1839)
The Tent, Ridge, Double, Small was replaced by the more spacious **Tent, 160-lb (JA 1549)**

Floor space: 10 ft x 10 ft
Pitching space: 28 ft x 22 ft
Height of walls: 2 ft 1 in
Height to ridge: 8 ft 8 in
Pitching party: 4 men
Total weight: 173 lb

Tent, R.D., Large (JA 5774)
The Tent, Ridge, Double, Large was replaced by **Tent, 160-lb (JA 1549)**. Although the floor space was identical it was one less specialist form of tentage to be required.

Floor space: 14 ft x 14 ft
Pitching space: 44 ft x 28 ft
Height of walls: 3 ft
Height to ridge: 9 ft 5 in
Pitching party: 4 men
Total weight: 219 lb

Tent and Flysheet Assembly 8340-99-136-6345
This tent although equipped with a flysheet was not especially intended for hot climates. It is still in service but only for RAF mountain rescue purposes. The tent is supported by 4 light alloy poles and there is a built in waterproof groundsheet.



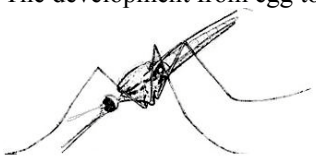
Floor space: 8 ft 6 in x 4 ft
Height to ridge: 4 ft 2 in
Pitching party: 2 men
Total weight: 230 lb

Warm Climate Tentage – keeping out the flies

A further complication of heat is the prevalence of mosquitoes and sandflies. It is a little confusing that although a tent may have a flysheet, it is merely a term applied to an extra layer of canvas over the tent, it has no role in excluding flies! Several tents have special provisions to try to exclude these unwanted guests by the use of net screens.

Tent, Bivouac, Mosquito-proof (JA5717)

The mosquito is a small two-winged six-legged insect of which there are several types. Not all mosquitoes spread disease but the assumption has to be made that they do. The most common diseases spread by mosquitoes are malaria, yellow fever and dengue fever. The development from egg to larva to pupa takes place underwater, but once hatched adult mosquitoes can fly for up to a mile.



During the day mosquitoes shelter in the shade but at night they come out to feed. Therefore troops asleep are at risk of being bitten. **Tent, Bivouac, Mosquito-proof** provided a very basic mosquito-proof accommodation with a single roof and doorways at each end with curtains. Supported by a vertical pole at each end, the canvas was made of a mesh cotton with a density of 30 strands by 40 strands per inch, this was adequate to keep out mosquitoes. The tent provided little protection from direct sunlight, but this would not be the time when mosquitoes would be most active. As the canvas was relatively porous, it provided a degree of airflow for cooling

Floor space: 7 ft x 6 ft
Pitching space: 13 ft 6 in x 6 ft 6 in
Height to ridge: 3 ft
Pitching party: 1 man
Total weight: 21 lb

The tent material was fragile and it was of course crucial to keep the tent free of rips. The lower edges were provided with sand pockets that were to be filled with sand or soil to keep the edges down to maintain the seal against mosquitoes entering. Given the need to avoid damaging the netting, it was permissible to dig several feet into the ground to increase the accommodation space.

Mosquitoes that got inside were to be 'swatted' or caught by clapping wet soapy hands. On some occasions in large tents or billets competitions were held to see which squad could collect the most mosquitoes. This apparently helped morale, kept the mosquito numbers down and gave the men something to do.

Sentries and patrols that had to be on duty at night needed special protection from being bitten. Here is an example of wartime anti-mosquito clothing that comprised a veil of netting that was tucked into the shirt, elasticised gauntlets and special trousers. These shorts had knee-flaps that were rolled down and tucked into the puttees after dark.

For demonstration purposes this man's right trouser leg has not yet been rolled down.

Tent, Bivouac, Sandfly-proof (JA 5718)

It is not just mosquitoes that can be vectors of disease in hot climates; the sandfly can carry not only Sandfly Fever but also Leishmaniasis.

Unfortunately mosquito netting provides no protection against invasion from this hairy little fly, as it is a quarter of the size of a mosquito. Canvas protection can only be given from cotton that is woven to a density of 120 strands by 120 strands per inch. **Tent, Bivouac, Sandfly-proof** is identical to the **Tent, Bivouac, Mosquito-proof** but is constructed of this denser materiel. The sandfly is not a good flyer, so increasing air movement from fans can be a useful countermeasure. Its weakness in flight means it is limited to travelling only about 50 yards from its breeding ground. On this basis it was advised that during the sandfly season, crude oil should be sprinkled over any broken ground for a distance of 50 yards from the encampment. The narrow mesh of the cotton meant that the occupants of the tent received very little air movement through the tentage making it unbearably hot inside. This was such a problem that the concept of sandflyproof canvas has been abandoned.

Nowadays whatever the insect threat, the procedure is to use mosquito netting but sprayed with insect repellent. It is said to be worthwhile trying to camp away from breeding grounds such as caves, rubble, cracked masonry and termite nests. But it would seem unwise to camp close to a termite nest anyway! Termites, which are sometimes called white ants, although they carry no particular disease threat, are the most destructive of all insects. Ants, insects and larvae have their own favourite foods, but termites will eat nearly anything, such as wood, materials of vegetable origin (clothing, tentage, cordage, paper etc), materials of animal origin (leather, woollens, felt, bristle etc) and food supplies.

Tent, Bivouac, with Insect Screen 8340-99-120-8556

This is one of the few modern tents to have an integral insect screen. Unlike the earlier tents it is predominately canvas and simply has an insect screen added to what is really a variant of **Tent, Bivouac, Cotton Duck 8340-99-210-6699** and is otherwise identical.

Tent, Bivouac, with Insect Screen 8340-99-120-8556

Tent, Bivouac, Cotton Duck 8340-99-210-6699

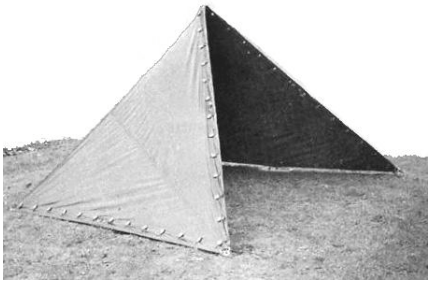
Floor space: 6 ft x 7 ft
Height to ridge: 3 ft
Pitching party: 1 man
Total weight: 21 lb

Cold Climate Tentage

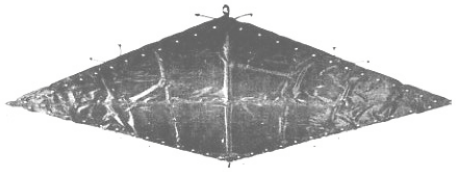
A cold climate may be further influenced by exposure to the wind or snow. Tentage for such places was classed as Mountain and Snow Equipment, but nowadays it is classed as Arctic Equipment. Features for tentage in such environments usually includes a ground sheet that is sometimes integral with the tent, snow flaps around the base, a liner for additional warmth, a sleeved entrance and sometimes white canvas for snow camouflage.

Tent, Shelter, Arctic, 8340-99-132-3012

This arctic tent seems to demonstrate none of the above mentioned criteria for cold weather use! It is not some wartime improvisation, but was introduced in the early 1970s and is still in service.



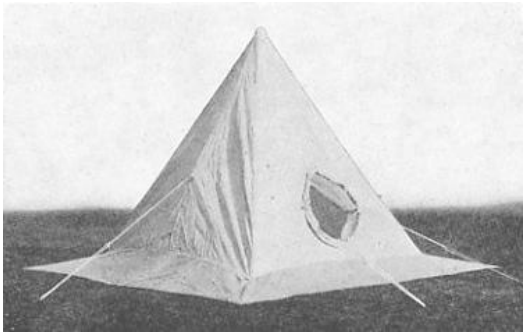
It is essentially a canvas sheet, made in what used to be described as a rhombus shape. But as geometry is no longer taught in schools, it now has to be called a diamond shape. This sheet of fabric can be folded to form a bivouac or windbreak; it is for individual survival in the Arctic. Two or more sheets can be joined together to give more cover.



The sheet is made of polyurethane-coated nylon in green/black; the other side is white nylon. At the widest points it measures 11 ft 4 in x 6 ft 5 in. Included in the kit are 3 pegs and a single alloy pole made up of 3 sections. The pole is painted bright orange to aid recognition in the snow. The total weight of the kit is just 3 lb 2 oz.

Tent, Pyramid, Double (AC 5252)

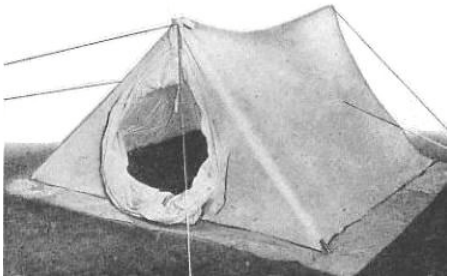
This wartime tent had a number of snow features. It had a white double-skinned canvas, with snow flaps at the base and circular sleeved entrances. The walls were supported by a pole at each corner. A novel feature was the ventilation through a rubber pipe inserted in the roof. If it was not required a wooden plug was inserted in the pipe. A separate ground sheet was fitted.



Floor space: 9 ft x 9 ft
Height to apex: 7 ft 9 in
Pitching party: 1 man
Total weight: 49 lb

Tent, Bivouac, Mountain, Light (AC 5387)

This small tent was indeed light, being only a quarter of the weight of the **Tent, Pyramid, Double**. The weight reduction was not just due to the size reduction but there was only one layer of light canvas. Only 3 poles were needed, these were each in 3 sections and were painted black for easy recognition in the snow. There were 2 poles at the front either side of the single entrance sleeve, the other centrally at the rear of the tent.



Floor space: 5 ft x 6 ft
Height to ridge: 2 ft 10 in
Pitching party: 1 man
Total weight: 13 lb

The relatively large entrance sleeve could be rolled and tied open with the tapes provided. In blizzard conditions on entering the tent the sleeve was constricted with the tapes and drawn inside the tent. The sewn-in ground sheet had a 12 in square opening with a flap for "sanitary purposes".

Modern Small Arctic Tents

Small arctic tents are still in use today with all three Services who have their own special types. The availability of polyester fabrics makes these lightweight tents more waterproof and are not susceptible to rotting in storage.

Bivouac, Arctic 8340-99-125-2045

Bivouac, Arctic is not only one of the lightest complete tents in service, it has the smallest packed size for its weight. This is important as it is solely for use in RAF survival packs. The front of the tent is supported by 3 poles which fit together to form an 'A' frame, but at the rear a single vertical pole is used.

Floor space: 5 ft x 6 ft 6 in
Height to ridge: 3 ft
Pitching party: 2 men
Total weight: 13 lb

This two man tent is made of a polyester/cotton water repellent fabric, polythene coated material is used for the built-in ground sheet. Surprisingly for a modern tent the poles are wooden.

Tent, Arctic, 2 Man 8340-99-419-7391

This arctic tent is solely for use in the Royal Navy. It is the same weight as its RAF counterpart but is a little more bulky although it has a slightly smaller floor space. At each end two light alloy poles are externally mounted to shape to the structure. The tent is made from a polyester fabric and has a built in groundsheet made of PVC coated nylon. A sleeved entrance gives good weather protection and shrouded ventilation holes are at each end. It was made by the Clan Tent Co Ltd and was also supplied to Australia.

Floor space: 4 ft x 7 ft
Height to ridge: 4 ft
Pitching party: 1 man
Total weight: 13 lb

Tent, Arctic, 2 Man (UK Pattern) 8340-99-132-4183

This Army tent bears a certain similarity to the RN arctic tent, so much so that the person who wrote the latest user handbook quotes the same floor space as the RN tent. This is incorrect the floor space is about a third larger, there are many instances in these user handbooks on tentage where incorrect information is given. The inner layer is made of 'Nomex' cloth, which is flame-resistant and white, this helps with vision inside the tent and the detection of flying insects. The outer nylon fabric is green on the exterior but black underneath. The black layer increases the degree of light proofing. Having a green exterior indicates the tent could have usage outside an arctic environment, this is confirmed by the mosquito netting around the entrance and ventilators. It was also supplied to the Netherlands.

Floor space: 4 ft 3 in x 9 ft
Height to ridge: 3 ft
Pitching party: 2 men
Total weight: 15 lb

The rigidity for the tent comes from two pairs of poles front and rear. Each of the poles comprises 3 sections and are made of aluminium alloy. The poles slide into sleeves and emerge at the base of the tent. The poles are narrowed at the lower end and pass through eyelets into the ground. At the upper end of the poles have slits to engage the guy lines to wrap the poles together. I do own one of these tents and I have to say this tethering arrangement to be somewhat unreliable, especially if you are trying to erect the tent on your own.

The rather imprecise terminations at the tops of the poles.

Many arctic tents have a circular entrance sleeve, but in this tent the entrance is triangular. This increased access makes users less likely to get tangled up in the thing, especially as the entry has to be at an oblique angle with a guy line immediately in front of the entrance.

Triangular entrance but with front guy line in the way.

Ventilators front & rear have mosquito netting.

There is a nylon strip at the base of the lining and is not attached to the outer sheet. This is so that any moisture building up would not drain down the sides and enter the tent. A polyurethane ground sheet is sewn into the base of the tent; the underside, which is in contact with the ground, is coated with nylon. This groundsheet has a flap sealed down with Velcro, which can reveal an aperture of 1 ft x 3 ft. To allow ventilation it is located by the entrance, it is for cooking and if necessary sanitary purposes.

Tent, Arctic, 5 Man

In the early 1970s a larger version of the 2-man tent underwent development trials to accommodate 5 men in arctic conditions. The rigidity of the tent was very dependent on guy lines from and rear of the tent; this was a big enough problem in the 2-man tent. But in the 5-man version the extra size meant there was significant sagging of the roof, as no horizontal pole was used on the roof ridge.

Note the sagging of roof.

Floor space: 11 ft x 11 ft
Height to ridge: 7 ft 6 in
Pitching party: 4 men
Total weight: 50 lb

Tent, Arctic, 5 Man (UK Pattern) 8340-99-132-4513

This is the version of the 5-man tent, which entered service and is still in current use. Although a little narrower than the development type, the sagging roof was cured by a ridge pole. The problem with securing the support poles that occurred on the 2-man version was overcome by fixing them to a clamp that then supports the ridge pole.

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Rear view of Tent, Arctic, 5 Man (UK Pattern)

The roof pole rests on a spigot from the apex piece.

Ventilation is provided by sleeves at each end of the tent, in addition there are netting windows each side of the entrance. Ventilation for cooking is from a flap that is fitted just on one side of the tent.

Cooking flap.

Floor space: 11 ft x 8 ft 8 in
Height to ridge: 6 ft 3 in
Pitching party: 2 men
Total weight: 58.5 lb

Tent, Arctic, 10 Man (UK Pattern) 8340-99-132-4514

As can be seen from the consecutive NSN (NATO Stock Number) this tent was introduced at the same time as the 5-man version. It is broadly a larger version of the 5-man tent, with a similar pair of roof ventilators, cooking flap and two netting windows either side of the entrance. It was also supplied to the Netherlands.

Floor space: 14 ft 1 in x 13 ft
Height to ridge: 7 ft 7 in
Pitching party: 2 men
Total weight: 90 lb

But the most fundamental difference in design from the 5-man tent lies in the pole supports. Instead of 2 poles arranged in an ‘A’ frame there is a single vertical pole at each end. This provided a good distribution of load provided the guy lines are properly positioned and adjusted. The vertical poles are located on the ground with metal base plates; a single horizontal pole supports the tent ridge. The poles are made of aluminium alloy and are made in 3 sections that are strung together for ease of assembly.

The tent partially assembled showing the vertical support poles and base plates.

Circular Tentage

Circular tents are known to have been in use for at least 100,000 years, there is evidence for their use by Neanderthal tribes. Of all types of tentage they are the most easy to conceive and construct i.e. a central pole bearing the main weight of the coverings fitted against the pole. In terms of surface area, a circular enclosure gives the greatest surface area for a given perimeter compared even with a square or rectangle. This may not have been realised by the Neanderthals but it fascinated Egyptian mathematicians over 5,000 years ago.

For many hundreds of years until the end of WW2, circular tentage had been the main tentage for British Army troop accommodation in the field. In the Crimea War nearly 11,000 circular tents were supplied. Like so many items of supply at the time, there was no satisfactory system of procurement and distribution; this shortcoming brought about more disease and death than the enemy could inflict. A Commission of Inquiry after the war heard that this large amount of tentage was about four times what should have been needed. Concern was expressed that the tents may have been poorly maintained, of poor quality and certainly not sturdy enough for the environment. There were reports that the single roof canvas did little to keep the troops warm who were frustrated further by the entrance flaps that allowed the wind to blow in. Furthermore the central pole that was supplied in two sections was prone to collapse.

Tent, C.S. Mk.5 (JA 5685)

C.S. means Circular, Single, which refers to a tent of circular design with a single layer of cotton canvas. The central pole comprised 2 sections made up from either Poles, Square or Poles Mk 4 or Mk 5. The Tent, C.S., Mk 5 was the final version that evolved from the tents used so disastrously in the Crimea. Improvements were a more durable canvas, a reduction in height, more effective overlapping doorways and more bracing lines. The roof was fitted with 3 ventilators. There were 20 tying up lines and 24 bracing lines. These 44 lines could present difficulties for the 2 men pitching the tent. The point for the centre pole was marked, from there a distance of 4 paces (10 ft) was marked out at 4 points of a cross. These were the peg points for the first 4 bracing lines which were identified with the wood tension adjusters being painted red.

Tent, C.S. Mk.5 in service 1930s to end of WW2.

Floor space: 13 ft 6 in diameter
Height to apex: 9 ft 9 in
Height of walls: 2 ft 2 in
Pitching party: 2 men
Total weight: 84 lb or 100 lb
(Two official books disagree on the weight.)

There was also a C.D. version, **Tent, Circular, Double.** This had two layers canvas and was obviously much warmer for the occupants. This only had 22 bracing lines and considering the double layer of canvas surprisingly only weighed 112 lb in all.

In use in WW1 an earlier Mk of Tent, C.S., which was 1 ft 1 in taller.

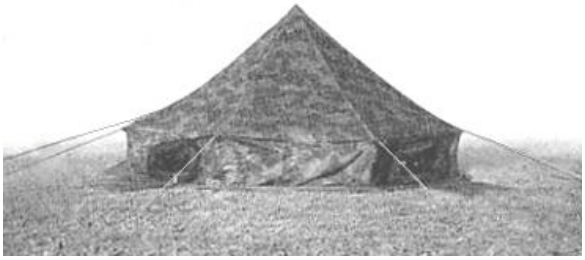
Circular tents	**Occupants per tent**	
Generals, Colonels & COs	1	
Other Officers	3	
Warrant Officers	5	(or 1 WO = 3 men)
Sergeants	7	(or 1 Sgt = 2 men)
Men	15	

By 1946 all the Tents, Circular, were obsolescent i.e. they were in use but no more were issued. Their role was assumed by **Tent, 80-lb** which is itself now obsolescent being replaced by **Shelter, G.P., 12 x 12**.

'Circular' Arctic Tentage

Tent, Octagonal (AC5156)

Although this 8-sided tent was made in disruptive pattern green it was intended for arctic use. It only had a single thickness roof made of nylon fabric, this was unusual for wartime tentage but it did make it fairly lightweight. There were snow flaps around the base and an integral ground sheet made of rubberised canvas. The main weight of the tent was borne by a central pole that rested on a base plate. The pole was made of aluminium and in two sections.



Floor space: 11ft 4 in x 11 ft 4 in (from widest points)
Height to apex: 6 ft 6 in
Height of walls: 1 ft 10 in
Pitching party: 1 man
Total weight: 28 lb

Despite its low weight it must have been a difficult tent to erect by just one man particularly under arctic conditions. In practice there was probably a second man to help. Although not stated, the normal occupancy would be at least two men as the ground sheet incorporated two square flaps for 'sanitary purposes'.

Tent, Arctic, 5 Man (Canadian Pattern) 8340-99-108-0072

This post-war tent was originally designated **Tent, Arctic, 5 Man**. It only became designated as Canadian Pattern to avoid confusion with **Tent, Arctic, 5 Man (UK Pattern)** that was introduced in the mid 1970's. The Canadian Pattern was phased out in the early 1980s. This five-sided tent was made from cotton water repellent material and supported by a telescopic magnesium centre pole. The detachable liner was made of white nylon. There was no integral ground sheet. There were two sleeved ventilators in the roof and a heat insulated vent for a cooker or heater on one side.

Note heater vent open.
Floor space: 11ft 9 in x 11 ft 9 in (from widest points)
Height to apex: 8 ft 4 in
Height of walls: 2 ft
Pitching party: 5 men
Total weight: 70 lb

Tent, Arctic, 10 Man (Canadian Pattern) 8340-99-108-0073

This post-war tent was introduced at the same time as the 5-man version. Again it was only later designated Canadian Pattern to avoid confusion with **Tent, Arctic, 10 Man (UK Pattern).** It was phased out at the same time as its 5-man counterpart. About the same height as 5-man version but the floor space increased from 100 sq ft to 175 sq ft. Apart from the scaling up in size the mode of construction was very similar.

Note heater vent open.

Floor space: 16ft 2 in x 16 ft 2 in (from widest points)
Height to apex: 8 ft 6 in
Height of walls: 3 ft
Pitching party: 5 men
Total weight: 85 lb

Spacing of tents

The original policy was that the shape of a camp should be reasonably rectangular, irregular edges increased the chance of troops firing at each other. Sometimes under war conditions camps were made irregular in shape to make it more difficult for the strength of the camp to be assessed from the air. Although a camp should not be unnecessarily spread out as it is more difficult to defend. But if tents are too close together it increases the fire risk. In a formal layout, tents should be pitched 5-10 yards parallel to the perimeter of the camp; this allowed space for troops falling in. The recommended spacing was:

Allow 1 yard between pegs of adjacent tents.
Allow 1 yard between tents of adjacent squadrons.
Allow 3 yards between tents of adjacent companies.
Allow 10 yards between tents of adjacent units.

Logistics

For planning purposes assumptions had to be made about the quantities of tentage needed. For an operational unit of 5,000 men in the 1950s it was assumed the typical structure would be:

Officers	200
W.O.s & Sgts	400
Rank & File	4,400
Total	5,000

Most accommodation would be in **Tents, 160 lb (double fly)** and 505 of them would be needed, accounting for 36 tons. Unfortunately only 500 of the accompanying groundsheets (**Groundsheet Mk VIII**) were to be supplied. Larger accommodation for baking, cooking, feeding, stores, medical services etc would be provided by a range of 85 marquees contributing 85 tons. At the end of a manoeuvre or temporary camp, the loss of up to 5% of wooden pegs was acceptable. A feel for camp life can be judged from some examples of other essentials:

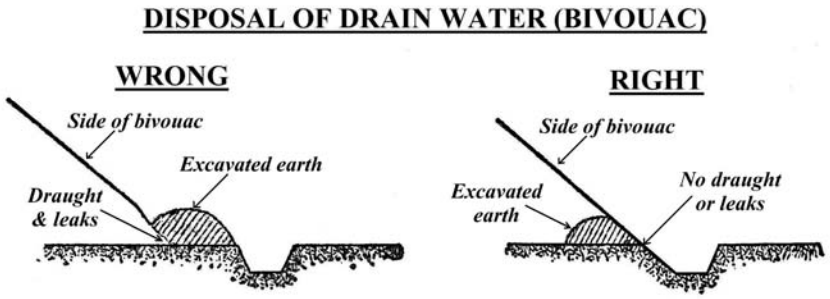
Latrine, Buckets, Large	250
Forms, G.S.	1,250
Blankets, B.S.	10,000
Ladles, G.S.	10
Kettles, Oval, 12 qts	625
Stretchers, Ambulance, Mk 2	5
Brooms, Bass, 24 oz, with handles	50
Tables, G.S.	625

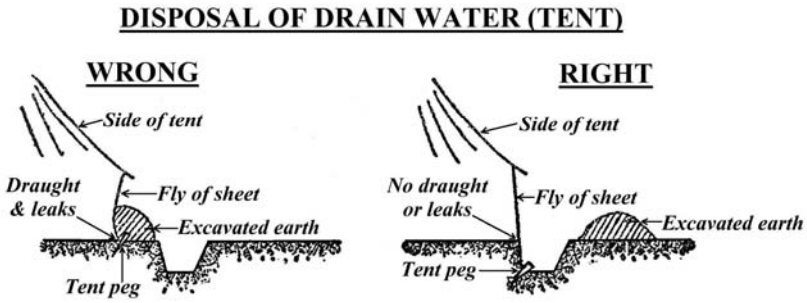
(No form of seating was provisioned)

Where circumstances or local conditions make it impossible or undesirable to dig trenches for latrines and urinals, then buckets were to be used. They should be in the proportion of one bucket to five officers or ten men. With this in mind, in the above example it would seem that there would only have been half the required number of buckets.

Rainwater Drainage

Most tents have ballast pockets or skirting around the base that can serve various purposes. The ballast pockets can be filled with sand or soil to keep out insects or draughts. The skirting flaps covered with snow, soil or sandbags are often essential for stability in the wind or keeping out rainwater. Although no tent should be pitched where rain is likely to accumulate it is sometime unavoidable and drainage trenches should be dug. In those tents that had no integral groundsheets it was particularly important to position the base of the tent properly otherwise flooding could result.





Some tents had integral groundsheets; sometimes they were separate items. Where there was dampness on the ground, wooden floors for tents could be authorised for medical purposes by the DDMS (Deputy Director of Medical Services). But wooden floors were automatically authorised for all tentage occupied by women.

Although rain can be an inconvenience whilst camping it cannot be regarded as a reliable source of water for day to day living i.e. water for drinking, cooking and washing. There has to be provision for separate water supplies that are identified by:

White flag for drinking water.
Blue flag for watering places for animals.
Red flag for washing or bathing places.

The requirements for different situations are:

Bivouac camping (minimum)	2 gallons	(9 litres) per man daily
Temporary camps (minimum)	5 gallons	(25 litres) per man daily
Temporary camps (normal)	15 gallons	(70 litres) per man daily
Temporary hospitals (minimum)	25 gallons	(114 litres) per bed daily

Care of Tents and Shelters

Some of the common causes of damage are:

1. Burns due to smoking, or use of generators, cookers or fires.
2. Holes due to careless pitching, stacking or stowage of articles too close to tent walls.
3. Splits in canvas caused thorough over taut guys. In wet weather tent guys must be slackened.
4. Tears in canvas during dismantling, especially with poles or tent pegs.
5. Damage caused by grease, oil or chemicals.
6. Loading into vehicles with contaminated floors or sharp projections.
7. In overseas theatres, activity of termites etc may cause damage to canvas.
8. Damage to poles by carelessness, excessive force or being driven over by vehicle.
9. Lowering of tent in uncontrolled way without adequate personnel.
10. Writing on canvas thus causing leaking points.
11. Damage due to wet canvas when packed or storage in a leaking storeroom.
12. Fire damage, through a wet canvas being stored giving rise to spontaneous combustion.
13. Damage due to rodent activity, particularly in prolonged storage.

Siting of Tents and Shelters

Tents to be positioned:

1. Level, to avoid hollows where water would collect when raining.
2. Especially away from vicinity of water drainage and latrines ideally 100 yards.
3. High ground with a slight slope is preferable to a valley floor.
4. Firm, to allow a good hold for the tent pegs.
5. Avoid clay as it usually damp.
6. Clear of obstacles (trees & bushes etc) to avoid damage to canvas.
7. Large woods with thick undergrowth & meadows with thick grass are unhealthy.
8. Dry short grass is ideal.
9. Dry long grass or heather can present a fire risk.
10. Campsites that have been used by other troops in the last two months should be avoided.
11. Prevailing winds should influence the position to offer minimum wind resistance with entrance away from the wind.
12. Positioned up wind of latrines.
13. Do not use a site marked with 'L' in stones, as this was the site of a latrine.

Other considerations

1. The bracing guy lines should follow the lines of the canvas seams and their angle should conform to the slope of the tent. This maximises support and minimises strain on the canvas.
2. A flame should never be left burning in an unoccupied tent.
3. If a tent catches fire it should be rapidly dismantled and the flames beaten out. Nearby tents downwind should be dismantled.
4. After long periods of occupation tents should be dismantled. The ground underneath swept and left for several hours before replacing the tent in its original position.
5. Generally food should not be eaten inside the tent as scraps can fall down and encourage vermin or flies.
6. All litter should be burnt before leaving camp to reduce intelligence gathering.

And finally

You will have seen how some of specialist tents have been rationalised into standardised types. Some of these in turn have themselves been superseded. Next time I will describe how rigid framed tents or shelters are increasingly becoming the standard accommodation in the field, thus recognising the value of good camping facilities. This is somewhat at variance to the official view expressed in 1912 that: "Experience goes to show that, except in extremes of climate, the absence of tents does not seriously affect the health of well-clothed and well-fed troops."

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